

# European Respiratory Society Annual Congress 2013

**Abstract Number:** 4747

**Publication Number:** P3854

**Abstract Group:** 2.2. Noninvasive Ventilatory Support

**Keyword 1:** End of life **Keyword 2:** Palliative care **Keyword 3:** Chronic disease

**Title:** Non-invasive ventilation for ALS with respiratory failure in home care settings

Dr. Vasiliy 33781 Shtabnitskiy vashtab@rambler.ru<sup>1</sup> and Dr. Lev 33782 Brylev lev.brylev@gmail.com<sup>1</sup>.<sup>1</sup>  
Respiratory and Nutritional Support Group, "Miloserdie" Medical Center, Moscow, Russian Federation .

**Body:** Introduction: Amyotrophic lateral sclerosis (ALS) is a progressive neuro-muscular disease which ultimately leads to death. Non-invasive ventilation (NIV) can alleviate dyspnea, improve sleep, quality of life, and prognosis. Currently home care NIV and IV (invasive ventilation) is preferred way to provide respiratory support for ALS. We present one of the first experiences of ALS home care in Russia. Aims and objective: To demonstrate first experience of ALS home care in Russia. Methods: 54 patients with ALS were included. Functional state (ALSFERS scale), disease stage (Jose C. Rosche et al. classification), spirometry, respiratory muscle strength, sleep pulseoxymetry were assessed. NIV and IV were initiated according to current guidelines. Results: Of 54 patients, 54% were IVB stage, III - 22%, IIB -15%, IIA - 9%. 26% were bulbar onset patients. Mean VC on admission was  $42.9 \pm 19.0$ , MIP (maximal inspiratory pressure) 14.5 (11-26), MEP (maximal expiratory pressure) 19.0 (14-25), dessaturation index 8 (5.6-15.1), mean saturation and minimal saturation were 92.1(90.1-95.0) and 81(74.5-87). ALSFRS negatively correlated with disease duration, VC% correlated with MIP and MEP. Mean saturation during sleep study related to age of the patient. 35 patient were given respiratory support, with 28 ventilated non-invasively, and 7 with tracheotomy. Currently 11 patients died. Older age, low index of minimal saturation, and low MIP were related to risk of death. ALSFRS, VC, MEP and dessaturation index were not related to risk of death. Conclusion: NIV can be provided in home care settings, VC, MIP, MEP, night pulseoxymetry can be effectively used to monitor disease progression in ALS home care.